

Now that's using your head!

Background: Did you ever wonder if the size of your head is related to how far you can jump? You teacher has been wondering just the same, so he decided that we would take on this question in today's lab.

Problem: Is the size of your head related to how far you can jump If so, what is the relationship?

Hypothesis: _____

Materials: a piece of graphing paper, a pencil, a large piece of string, a ruler.

Procedure:

1. The first thing you should do is take the piece of string and, using only your left hand, wrap the string around the back of your head & touch that end to your nose as well. Make sure to mark the string so your know how long it is.
2. Take that piece of string and using a ruler measure the length of that string (in centimeters). Do this procedure three times. After you get these three measurements, you should delete the lowest and the highest measurement from your data. You should now have one measurement, put this value for head size in the proper place on the data chart on the back of this sheet.
3. Next here comes the fun, we will go outside as a large group and we will form one line. You will then get a chance to broad jump one at a time. Your teacher will help you measure the length of your jump. After you finish jumping you will go to the end of the line to jump again. You will get three chances to jump.
4. After you receive the results of all your jumps, disregard your highest and lowest jumps and write the remaining jump distance in the appropriate space of the data chart on Trial Number 1.
5. Your next objective is to share your data with the rest of the class. One at a time you will write your data (head size & length of jump) on the board. You don't need to put your name next to it.
6. You will then each prepare a table of the classes data. Using this data you will compose a line graph to compare head size to length of jump. After completing the graph, is their a relationship between head size and length of jump?

Data:

Trial Number	Head Size	Jump Distance
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		
26		
27		
28		
29		
30		

Analyze and Conclude:

1. Was your hypothesis correct? Please explain with examples.
2. What errors were there in this experiment? (What were some things that would make your answers wrong?)
3. Was there a relationship between the size of your head related to how far you can jump? Please give examples to support your answer.